Abstract

Microelectronic structure

A microelectronic structure is proposed in which an adhesion layer (20) is situated between a base substrate (5) and a barrier layer (25, 30). Said adhesion layer improves the adhesion of the barrier on the base substrate, in particular to insulation layers situated there. Microelectronic structures of this type are preferably used in semiconductor memories.

Figure 1e

List of reference symbols

5 Base substrate
7 Polysilicon layer
9 Metal silicide layer
10 Contact hole/opening
15 Surface of the base substrate
20 Adhesion layer
25 Oxygen-containing iridium layer
30 Oxygen barrier layer/iridium dioxide layer
32 Side regions
35 Noble metal layer/platinum layer/metal-containing electrode layer
40 Dielectric metal-oxide-containing layer/SBT layer
45 Further noble metal layer/platinum layer
50 Silicon oxide layer
55 TEOS layer/silicon nitride layer
65 Metal silicide
70 Selection transistor
75 Storage capacitor
80/85 Doped regions
90 Silicon substrate
95 Gate electrode
100 Gate dielectric
105 Lateral insulation webs
110 Insulation layer
115 Bottom electrode